COSI

- **Programa:** Erasmus +
- **Acción:** KA1 Student and staff mobility in Joint Master Degrees
- **Fechas:** 31/8/19 30/8/25
- **Coordinación:** Norwegian University of Science and Technology (Noruega)
- **Socios:** University Jean Monnet Saint-Etienne (Francia), Universidad de Granada (España), Ita-Suomen Yliopisto (Finlandia).
- **Descripción:**

The 2-years (120 ECTS) Erasmus Mundus Joint Master Programme Computational Colour and Spectral Imaging (COSI) will provide interdisciplinary and innovative training programme in a specialized field combining colour and spectral imaging with advanced data science.

We will provide students with a unique competence and skill set, including advanced methodologies, models, and practical applications with two goals: Enhance their employability and improve their career prospects on one hand, and meet the current and future needs of industrial R&D and academic research on the other. The Information and Communication Technologies, Health & Life Science, and Science & Technology sectors are in full growth.

The innovative use of images is increasingly important in these sectors, particularly in Quality Control of Manufactured Products, Medical and Biomedical Imaging, Spectral Systems Design, Media Technology, Internet of Things. COSI competence is highly sought after in a wide range of sectors where the continued evolution of R&D fields requires adapted and extremely specialized courses with a strong focus on industrial applications and recent trends in various research areas. COSI is building on more than ten years of excellence in European higher educational collaboration between the four full partner universities: NTNU -The Norwegian University of Science and Technology (NO), UJM -Université Jean Monnet Saint-Etienne (FR), UGR -University of Granada (SP), UEF -University of Eastern Finland (FI). Furthermore, a large number of universities and companies worldwide have joined the COSI consortium as associate partners.

The first semester at NTNU will include a comprehensive coverage of the fundamentals of colour and spectral imaging through Computer graphics fundamentals and applications, Cross-media colour reproduction, Deep learning and visual computing, Introduction to research on colour and visual computing. Then, the students will have the opportunity to select between different specialisation areas, at either UJM (Colour Image Modelling and Understanding) or UGR (Photonics, Image and Vision) in the second, and between NTNU (Colour and Visual Computing) and UEF (Computational Spectral Imaging) in the third semester. Between the 2 years, the students will carry out a summer internship with one of our associate partners. In the fourth semester, the students will devote themselves to their master thesis, which will be carried out in a company or a research center. With competitive scholarships available we expect to recruit excellent students from various educational backgrounds worldwide. The whole curriculum is entirely taught in English, but students will also gain multicultural skills as well as other transversal skills. COSI students will receive a specialized education very well adapted to their background, interests, and future career plans.

https://cosi-master.eu/